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EXAMINER

ZHEN, LI B

ART UNIT	PAPER NUMBER
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2194

DATE MAILED: 11/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/823,531	Applicant(s) CHEN ET AL.	
	Examiner Li B. Zhen	Art Unit 2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 13 and 17-101 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 13 and 17-101 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/05; 9/02; 10/02; 05/03; 6/03; 8/03; 11/03; 8/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1 – 10, 13 and 17 – 101 are pending in the application.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/26/2005 has been entered.

Response to Arguments

3. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

4. Claim 76 objected to because of the following informalities: "the sending means the command" [line 2, grammatical error]. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 22-26, 36-38, 46-58 and 64-66 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Currently amended

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claims recite the new limitations: "user interface object comprising information regarding a user interface used to communicate via the communication channel" [i.e., claim 22, lines 5-6; claim 46, lines 3-4; claim 54, lines 3-4; claim 64, lines 4-5], "instructions to access the communication channel table, the user interface object table...to communicate via the communication channel" [i.e., claim 22, lines 14-15; claim 54, lines 10-11; claim 66, lines 2-3] and "instructions to access the user interface object table when the user interface is to display information related to a communication via the communication channel" [claim 46, lines 6-7]. Although applicant's specification discloses user interface objects and communication channels, applicant's specification does not implicitly or inherently describe a table that directly associates a user interface or user interface object with a communication channel. Throughout the specification, applicant discloses an user interface object is associated with command and the command is associated with a channel driver for a communication channel [i.e., p. 18, line 33 – p. 19, line 2; p. 39, line 24 – p. 40, line 6; p. 41, lines 11 – 18; p. 42, lines 23 – 30]. Examiner was unable to locate any disclosure of a user interface object table or an object table that directly associates a user interface or user interface object with a communication channel. Therefore, the applicant fails to disclose the newly recited limitations in the specification as filed.

7. Claims 22-26, 36-38, 46-58 and 64-66 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Specifically, the specification does not teach a user interface object table or an object table that directly associates a user interface or user interface object with a communication channel and accessing the user interface object table or object table. The specification disclose activating a user interface object, activating an InvokeCommand function of the user interface object, sending the name of the command to a communication server, and using the command table, channel driver table, and configuration table to determine the channel driver [i.e., p. 18, line 33 – p. 19,

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line 2; p. 39, line 24 – p. 40, line 6; p. 41, lines 11 – 18; p. 42, lines 23 – 30]. According to the specification, there is an indirect relationship between the user interface object and a communication channel through the mapping of a series of tables. However, claims 22-26, 36-38 and 46-58 recite a direct relationship between the user interface object and the communication channel using only one table. Applicant discloses a desire to provide flexibility to third party vendors for integrating vendor-specific communication channels through the use of a communication server [p. 8, line 27 – p. 9, line 4]. The user interface objects are part of the front-end (graphical user interface), and a table that directly links the user interface object to the vendor-specific communication channel will likely decrease flexibility because the direct link would suggest that the communication server would be bypassed. The specification does not implicitly or inherently disclose what information is stored in the user interface object or object table and how it is used to provide a direct relationship between the user interface object and the communication channel.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 22 – 26, 36 – 38 and 46 – 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent NO. 6,092,102 to Wagner [cited in previous office action] in view of U.S Patent NO. 5,961,620 Trent et al. [hereinafter referred to as Trent].**

10. As to claim 46, Wagner teaches the invention substantially as claimed including a computer-readable medium [col. 11, lines 31 – 36] comprising a database comprising:

a user interface object table [database 138, 140, Fig. 3; col. 11, lines 31 – 39] comprising information regarding a user interface object [graphical user interface (GUI) to I/O device 128; col. 9, lines 1 – 8] of a user interface [notifier front end 122 provides a suitable graphical user interface (GUI) to I/O device 128, such as a display and keyboard and/or mouse, that permits a particular user, after security login, to modify the data in the preferences 34 and functions 36; col. 9, lines 1 – 8] to communicate with a communication channel [whenever the delivery instructions (DEL.sub.-- INST) specify the communication channel (CHANNEL) as a Type 2 database (i.e., T2(RECIPIENT, MT, ARGs)), the notifier database manager 120 queries database 140 which is a two-tiered, N-dimensional database defining the communication channel(s) based on the user, the message type and other arguments ARGs; col. 11, lines 32 – 60].

11. Although Wagner teaches the invention substantially, Wagner does not specifically teach accessing the user interface object table when the user interface is to display information related to a communication via the communication channel.

However, Trent teaches a user interface object table [Address book DLL 210 provides address book services to application programs executing on computer system 100, including fax application program 201, video conferencing application program 202, and e-mail application program 204; col. 5, lines 13 – 27 and col. 6, lines 13 - 23] comprising information regarding a user interface object [user selection or dialing events entered in address book application program 206; col. 6, lines 13 – 23] to communicate with a communication channel [if the user selects or dials a fax destination identifier (i.e., fax number) through the user interface function of address book application program 206, then address book application program 206 invokes the dial notification function of address book DLL 210. Dial notification function in address book DLL 210 then invokes the fax callback function in fax application program 201 and provides the selected or dialed destination identifier from the address book database; col. 6, lines 31 – 42] and accessing the user interface object table when the user interface is to display information related to a communication via the communication channel [Address book DLL 210 implements dial notification routines or functions that invoke the appropriate

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callback functions of the client communication application programs; col. 6, lines 23 – 30].

12. It would have been obvious to a person of ordinary skill in the art at the time of the invention to apply the teaching of accessing the user interface object table when the user interface is to display information related to a communication via the communication channel as taught by Trent to the invention of Wagner because this provides an extensible architecture to support an open-ended series of added type dynamic link libraries (drivers), where each type of dynamic link library supports a specific connection address type (communication channel) [col. 7, lines 9 - 26 of Trent] and provides support for address types defined by third party applications [col. 8, lines 41 – 49 of Trent].

13. As to claim 47, Wagner teaches a communication channel table comprising information regarding the communication channel [col. 11, lines 32 – 39].

14. As to claim 48, Wagner teaches the communication channel table comprises information about a plurality of communication channels [col. 11, lines 60 – 63].

15. As to claims 49 and 50, Wagner teaches a channel driver table comprising information about a plurality of channel drivers [communication channel manager 124 employs tables of information that map from the identity of the user(s) of the message 130 to the address(es) employed by the communication channel(s); col. 9, lines 9 – 39], wherein each channel driver of the channel drivers controls the operation of one communication channel of the communication channels [col. 7, line 62 – col. 8, line 8].

16. As to claim 51, Wagner teaches a command table comprising information regarding a command sent to the communication channel [transaction log of communicated information 126; col. 9, lines 39 – 54].

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17. As to claim 52, Wagner teaches an event table comprising information regarding an event originating in response to a communication received from the communication channel [col. 8, lines 34 – 47].

18. As to claim 53, Wagner teaches an event response table comprising information regarding an event response to be performed in response to the event [If ED 116 finds a pattern in the data (i.e., an "event"), the ED 116 evokes an inference engine; col. 8, lines 35 – 65].

19. As to claim 54, Wagner as modified teaches a database [col. 11, lines 31 – 36 of Wagner] comprising:

an object table [database 138, 140, Fig. 3; col. 11, lines 31 – 39 of Wagner], wherein the object table comprises information regarding a user interface object [graphical user interface (GUI) to I/O device 128; col. 9, lines 1 – 8 of Wagner] of a user interface [user selection or dialing events entered in address book application program 206; col. 6, lines 13 – 23 of Trent] used to communicate via a communication channel [col. 6, lines 31 – 42 of Trent]; and

a communication channel table wherein the communication channel table comprises information regarding the communication channel associated with the user interface object [whenever the delivery instructions (DEL.sub.-- INST) specify the communication channel (CHANNEL) as a Type 2 database (i.e., T2(RECIPIENT, MT, ARGs)), the notifier database manager 120 queries database 140 which is a two-tiered, N-dimensional database defining the communication channel(s) based on the user, the message type and other arguments ARGs; col. 11, lines 32 – 60 of Wagner] and instructions to access the object table and the communication channel table to communicate via the communication channel [Address book DLL 210 implements dial notification routines or functions that invoke the appropriate callback functions of the client communication application programs; col. 6, lines 23 – 30 of Trent]. As to the motivation for combining Wagner with Trent, see the rejection to claim 46 above.

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20. As to claim 55, Wagner teaches the object table further comprises information regarding an action to be performed when the user interface object is activated [col. 8, lines 35 – 65].

21. As to claim 56, Wagner teaches the action comprises issuing a command to the communication channel [delivery instructions (DEL.sub.-- INST) specify the communication channel (CHANNEL) as a Type 1 database; col. 11, lines 32 – 57].

22. As to claim 57, Wagner teaches the action comprises setting an agent status to one of ready and not ready [If the acknowledgement 125 is not provided by the user within a predefined time, then the message 38 is resent to the user and the process of checking for the acknowledgement 125 is repeated; col. 14, lines 39 – 67].

23. As to claim 58, Wagner teaches the object table further comprises a notification object [notifier modules 120,122,124,126; col. 8, lines 47 – 64].

24. As to claim 22, this is rejected for the same reasons as claims 46 – 49, 51 and 52 above.

25. As to claim 23, Wagner teaches the communication channel table provides access to:

a channel ID of the communication channel [communication channel(s) (CHANNEL); col. 11, lines 33 – 57] ;

media type of the communication channel [message type (MT); col. 11, lines 33 – 57]; and

a configuration ID of a configuration to which the communication channel belongs [arguments ARGs; col. 11, lines 33 – 57].

26. As to claim 24, Wagner teaches the event table provides access to an event ID of the event [message ID; col. 10, lines 1 – 43];

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an event name of the event [HEADER20; col. 10, lines 1 – 43]; and
a channel driver ID of the channel driver [communication channel(s) (CHANNEL);
col. 11, lines 33 – 57].

27. As to claim 25, Wagner teaches the command table provides access to:
a command ID of the command [col. 10, lines 25 – 43];
a command name of the command [delivery instructions 28 (DEL.sub.-- INST);
col. 10, lines 25 – 43]; and
a channel driver ID of the channel driver [communication channel(s) (CHANNEL);
col. 11, lines 33 – 57].

28. As to claim 26, Wagner teaches the channel driver table comprises:
a channel driver ID of the channel driver [communication channel(s) (CHANNEL);
col. 11, lines 33 – 57];
a media type of the communication channel [message type (MT); col. 11, lines 33
– 57];
a file name of the channel driver [col. 7, line 63 – col. 8, line 7]; and
a media string that allows a media service associated with the channel driver to
be invoked [col. 8, lines 1 – 23].

29. As to claim 36, this is rejected for the same reasons as claim 49 above.

30. As to claim 37, this is rejected for the same reasons as claim 47 above.

31. As to claim 38, this is rejected for the same reasons as claim 46 above.

32. **Claims 1 – 10, 13, 17 – 21, 34, 39 – 42, 59 – 63, 67 – 76 and 84 – 94 are
rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent NO.
6,463,292 to Rahman [cited in previous office action] in view of Trent.**

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33. As to claim 39, Rahman teaches the invention substantially as claimed including a user interface [user-interface manager 14, Fig. 2; col. 5, lines 12 – 20] for communicating comprising:

- a user interface object [one or more user-interactive prompts; col. 5, lines 13 – 15];

- a receiving module to receive an activation of the user interface object [user-interface manager 14 provides one or more user-interactive prompts for redirecting the detected data message in accordance with a user preference or selection entered via the user interface 15; col. 5, lines 12 – 20], wherein

- each communication channel of a plurality of communication channels has a media type [col. 6, lines 1 – 19], and

- at least two communication channels of the communication channels have different media types [col. 4, lines 16 – 39].

34. Although Rahman teaches the invention substantially as claimed, Rahman does not specifically teach the activation of the user interface object is associated with a command and causes a channel driver associated with the command to be identified.

However, Trent teaches the activation of the user interface object is associated with a command and causes a channel driver associated with the command to be identified [if the user selects or dials a fax destination identifier (i.e., fax number) through the user interface function of address book application program 206, then address book application program 206 invokes the dial notification function of address book DLL 210. Dial notification function in address book DLL 210 then invokes the fax callback function in fax application program 201 and provides the selected or dialed destination identifier from the address book database; col. 6, lines 31 – 42].

35. It would have been obvious to a person of ordinary skill in the art at the time of the invention to apply the teaching of associating activation of a user interface object with a command and causing a channel driver associated with the command to be identified as taught by Trent to the invention of Wagner because this provides an extensible architecture to support an open-ended series of added type dynamic link libraries (drivers), where each type of dynamic link library supports a specific connection

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address type (communication channel) [col. 7, lines 9 - 26 of Trent] and provides support for address types defined by third party applications [col. 8, lines 41 – 49 of Trent].

36. As to claim 40, Rahman teaches an event handling module to handle an event from an incoming communication channel of the communication channels [data protocol detector 12 detects an alert message of a particular data protocol received by a mobile station 26; col. 4, line 65 – col. 5, line 11].

37. As to claim 41, Rahman teaches a notifying module to provide a notification of the event [particular data protocol the detector 12 sends an alert signal to the user-interface manager 14; col. 5, lines 1 – 11].

38. As to claim 42, Rahman teaches a responding module to perform an event response to the event [Upon receipt of the alert signal from the data protocol detector 12, the user-interface manager 14 provides one or more user-interactive prompts; col. 5, lines 12 – 20].

39. As to claim 59, Rahman as modified teaches an apparatus to communicate comprising:

a user interface [col. 5, lines 12 – 20 of Rahman] comprising at least one user interface object [col. 5, lines 13 – 15 of Rahman] operable to be activated, wherein activation of one of the at least one user interface object is associated with issuing a command to one communication channel of a plurality of communication channels [col. 5, lines 12 – 20 of Rahman],

each communication channel of the communication channels has a media type [col. 6, lines 1 – 19 of Rahman], at least two communication channels of the communication channels have different media types [col. 4, lines 16 – 39 of Rahman], and the activation causes a channel driver comprising the command to be identified [Address book DLL 210 implements dial notification routines or functions that invoke the

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appropriate callback functions of the client communication application programs; col. 6, lines 23 – 30 of Trent]. As to the motivation for combining Rahman with Trent, see the rejection to claim 39 above.

40. As to claim 60, Rahman teaches the user interface is operable to communicate with a communication server [col. 2, lines 52 – 62], and wherein the communication server causes the command to be issued to the one communication channel [col. 5, lines 45 – 60 of Rahman].

41. As to claim 61, Rahman teaches the communication server further receives an indication of activation of the user interface object [alert response message contains message control information or message redirection information such as a data target identifier or address; col. 5, lines 38 – 60].

42. As to claim 62, Rahman teaches a channel driver is communicatively coupled to the one communication channel to issue the command [col. 4, lines 1 – 5].

43. As to claim 63, Rahman teaches the channel driver is one of a plurality of channel drivers, wherein each channel driver of the channel drivers is associated with an associated communication channel of the plurality of communication channels [col. 4, lines 1 – 5; col. 3, lines 38 – 43; col. 6, lines 35 – 43].

44. As to claim 1, Rahman as modified teaches a method for communicating comprising:

obtaining an event communicated via an incoming communication channel of a plurality of communication channels [data protocol detector 12 detects an alert message of a particular data protocol received by a mobile station 26; col. 4, line 65 – col. 5, line 11 of Rahman], wherein each communication channel of the communication channels has a media type [col. 6, lines 1 – 19 of Rahman], at least two communication channels of the communication channels have different media types [col. 4, lines 16 – 39 of

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Rahman], and the event corresponds to a work item available via the incoming communication channel [data protocol detector 12 detects an alert message of a particular data protocol received by a mobile station 26; col. 4, lines 65 – 67 of Rahman];

providing a notification of the work item via a user interface [particular data protocol the detector 12 sends an alert signal to the user-interface manager 14; col. 5, lines 1 – 11 of Rahman];

receiving an activation of a work item object of the user interface, the work item object being associated with the work item [user-interface manager 14 provides one or more user-interactive prompts for redirecting the detected data message in accordance with a user preference or selection entered via the user interface 15; col. 5, lines 12 – 20 and 38 – 60 of Rahman];

identifying a channel driver comprising a command associated with the activation of the work item object [Address book DLL 210 implements dial notification routines or functions that invoke the appropriate callback functions of the client communication application programs; col. 6, lines 23 – 30 of Trent]; and

causing the channel driver to issue the command [col. 6, lines 31 – 42 of Trent] to an outgoing communication channel of the communication channels [alert response message is represented by (or derived from) the modulating signal suited for application to a modulator in the transmitter of the mobile station 26; col. 5, lines 48 – 54 of Rahman]. As to the motivation for combining Rahman with Trent, see the rejection to claim 39 above.

45. As to claim 2, Rahman teaches the incoming communication channel and the outgoing communication channel are the same [col. 2, lines 63 – 67].

46. As to claim 3, Rahman teaches performing the command by the outgoing communication channel [col. 6, lines 43 – 60].

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47. As to claim 4, Rahman teaches providing the notification in real time with the obtaining the event [upon receipt of the alert message the mobile station may automatically setup a voice channel call for subsequent transmission of the modulated signal; col. 6, lines 1 – 19].

48. As to claim 5, Rahman teaches invoking a notification module of the user interface [col. 5, lines 1 – 11].

49. As to claims 6 and 7, Rahman teaches the activation of the work item object is associated with an accept work item command [interface manager 14 may provide a menu or a group of choices that a user may select via the user interface to redirect the data message (represented by the alert message) to a communications data target; col. 5, lines 37 – 60].

50. As to claim 8, Rahman as modified teaches sending the command to the command channel driver [col. 6, lines 31 – 42of Trent].

51. As to claim 9, Rahman teaches obtaining the command from the user interface by a communication server, wherein the communication server sends the command to the channel driver [user input is conveyed to the WDS 32 as an alert response message in reply to the alert message previously sent; col. 5, lines 37 – 60].

52. As to claim 10, Rahman teaches sending the command to the channel driver for the incoming communication channel [col. 6, lines 43 – 60] if the incoming communication channel and the outgoing communication channel are the same [col. 2, lines 63 – 67].

53. As to claim 13, Rahman as modified teaches a method for communicating comprising:

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obtaining an event communicated via an incoming communication channel of a plurality of communication channels [col. 4, line 65 – col. 5, line 11 of Rahman], wherein each communication channel of the communication channels has a media type [col. 6, lines 1 – 19 of Rahman], and at least two of the communication channels have different media types [col. 4, lines 16 – 39 of Rahman];

providing a notification of the event via the user interface [col. 5, lines 1 – 11 of Rahman];

receiving an activation of a command object of the user interface, the command object being associated with a command related to the event [col. 5, lines 12 – 20 and 38 – 60 of Rahman];

identifying a channel driver comprising the command [Address book DLL 210 implements dial notification routines or functions that invoke the appropriate callback functions of the client communication application programs; col. 6, lines 23 – 30 of Trent]; and

cause the channel driver to issue the command [col. 6, lines 31 – 42 of Trent] to an outgoing communication channel of the communication channels [col. 5, lines 48 – 54 of Rahman]. As to the motivation for combining Rahman with Trent, see the rejection to claim 39 above.

54. As to claim 17, this is rejected for the same reasons as claims 1 and 5 above.

55. As to claim 18, this is rejected for the same reasons as claim 2 above.

56. As to claim 19, Rahman as modified teaches a user interface [user-interface manager 14, Fig. 2; col. 5, lines 12 – 20 of Rahman] for communicating comprising:

a notification object to provide a notification of an event communicated via an incoming communication channel of a plurality of communication channels [col. 4, line 65 – col. 5, line 11 of Rahman], wherein each communication channel of the communication channels has a media type [col. 6, lines 1 – 19 of Rahman], and at least

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two of the communication channels have different media types [col. 4, lines 16 – 39 of Rahman]; and

a command object wherein activation of the command object is associated with a command [col. 6, lines 23 – 30 of Trent], and the activation of the command object causes a channel driver comprising the command to be identified [col. 6, lines 31 – 42 of Trent], and the channel driver issues the command [col. 5, lines 12 – 20 and 38 – 60 of Rahman] to an outgoing communication channel of the communication channels [col. 5, lines 48 – 54 of Rahman]. As to the motivation for combining Rahman with Trent, see the rejection to claim 39 above.

57. As to claim 20, this is rejected for the same reasons as claim 2 above.

58. As to claim 21, Rahman as modified teaches a computer system comprising:

a processor [col. 3, lines 20 – 25 of Rahman];

a display [col. 5, lines 11 – 21 of Rahman], coupled to said processor;

computer readable medium coupled to said processor [storage medium 19, Fig. 2; col. 4, lines 52 – 60 of Rahman]; and

computer code, encoded in said computer readable medium, configured to cause said processor to communicate using at least one communication channel of a plurality of communication channels, wherein each communication channel of the communication channels has a media type [col. 6, lines 1 – 19 of Rahman], and at least two of the communication channels have different media types [col. 4, lines 16 – 39 of Rahman], by virtue of being configured to cause said processor to:

obtain an event communicated via an incoming communication channel of the communication channels [col. 4, line 65 – col. 5, line 11 of Rahman], wherein the event corresponds to a work item available via the incoming communication channel [col. 4, lines 65 – 67 of Rahman];

provide a notification of the work item via a user interface presented on the display [col. 5, lines 1 – 11 of Rahman];

receive an activation of a work item object of the user interface, the work item object being associated with the work item [col. 5, lines 12 – 20 and 38 – 60 of Rahman], wherein the activation of the work item object causes the channel driver comprising a command associated with the activation of the work item object to be identified [col. 6, lines 23 – 30 of Trent] and the channel driver issues the command [col. 6, lines 31 – 42 of Trent] associated with the activation of the work item object to an outgoing communication channel of the communication channels [col. 5, lines 48 – 54 of Rahman].

59. As to claim 34, Rahman teaches a causing module to cause the command to be issued to the outgoing communication channel [col. 5, lines 48 – 54].

60. As to claims 67 – 76, these are apparatus claims that correspond to method claims 1 – 10; note the rejections to method claims 1 – 10 above, which also meet these apparatus claims.

61. As to claim 84, this is an apparatus claim that corresponds to method claim 13; note the rejection to claim 13 above, which also meets this apparatus claim.

62. As to claims 85 – 94, these are product claims that correspond to method claims 1 – 10; note the rejections to claims 1 – 10 above, which also meet these product claims.

63. Claims 27 – 33, 35, 43 – 45, 77 – 83 and 95 – 101 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rahman and Trent further in view of U.S. Patent NO. 6,389,132 to Price [cited in previous office action].

64. As to claim 43, Rahman as modified does not specifically teach a status updating module to update a status of an agent using the user interface to one of ready and not ready when the status object is activated.

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However, Price teaches a status updating module to update a status of an agent [Agent 30 can make himself/herself available to take multiple customer requests; col. 6, lines 1 – 13] using the user interface to one of ready and not ready when the status object is activated [With knowledge of the availability of pool of agents 28, Contact Server 20 can connect a request to an available agent 30 and initiate Web Server 18 and/or Switch Server 22 to establish a live connection with customer 12; col. 3, lines 11 – 34].

65. It would have been to a person of ordinarily skilled in the art at the time of the invention to apply the teaching of a status updating module to update a status of an agent using the user interface to one of ready and not ready when the status object is activated as taught by Price to the invention of Rahman as modified because this schedules customer requests to available agents and enables the customer to use their time in a more constructive manner rather than just "sitting" and waiting for a response from an available agent [col. 1, lines 52 – 65 of Price].

66. As to claim 44, Rahman as modified teaches a status changing module to change a status of an agent using the user interface to one of ready and not ready [col. 6, lines 1 – 13 of Price].

67. As to claim 45, Rahman as modified teaches an assigning module to assign an agent to receive a notification of an event [col. 2, lines 55 – 61 of Price]; and a notifying module to provide the notification to the agent [col. 8, lines 50 – 67 of Price].

68. As to claims 27 and 28, Rahman as modified teaches the activation of the work item object is associated with selecting one communication channel of the plurality of communication channels for working on the work item [col. 5, lines 14 – 17; col. 6, lines 9 – 11; col. 6, lines 28 – 32; col. 6, lines 54 – 60; col. 6, lines 60 – 63 of Price].

69. As to claims 29 and 30, Rahman as modified the activation of the work item object is associated with one of a suspend work item command [Customer 32 can be

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placed on hold awaiting availability of agent 30; col. 5, lines 10 – 15 of Price] and a retrieve work item command [Agent 30 can select customer A 32; col. 5, lines 14 – 17 of Price].

70. As to claim 31, Rahman as modified teaches the activation of the work item object is associated with one of a blind transfer of work item command, a consultative transfer of work item command, and a conference command [col. 4, lines 15 – 37 of Price].

71. As to claim 32, Rahman as modified teaches the user interface comprises a plurality of user interfaces, wherein each user interface of the user interfaces is associated with an agent of a plurality of agents [Pool of agents 28 may have user interfaces that can present requests from multiple customers 10; col. 3, lines 10 – 26 of Price]; and further comprising:

determining one agent of the agents to be notified of the event [col. 2, lines 55 – 61 of Price], wherein the providing the notification comprises providing the notification to the one agent via the user interface associated with the one agent [col. 8, lines 50 – 67 of Price].

72. As to claim 33, Rahman as modified teaches determining the command to be issued from a context of the work item object when the work item object is activated [col. 4, lines 25 – 37 of Price].

73. As to claim 35, Rahman as modified teaches an assignment module to determine an assignment of an agent to the work item [col. 2, lines 55 – 61 of Price].

74. As to claims 77 – 83, these are apparatus claims that correspond to method claims 27 – 33; note the rejections to method claims 27 – 33 above, which also meet these apparatus claims.

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75. As to claims 95 – 101, these are rejected for the same reasons as claims 27 – 33 above.

76. Claims 64 – 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rahman and Trent further in view of Wagner.

77. As to claim 64, Rahman as modified does not specifically teaches a database comprising a command table regarding a command and a user interface object table comprising information regarding the user interface object and the command to be issued upon activation of the user interface object.

However, Wagner teaches a database [col. 11, lines 31 – 36] comprising a command table regarding a command [transaction log of communicated information 126; col. 9, lines 39 – 54] and a user interface object table comprising information regarding the user interface object and the command to be issued upon activation of the user interface object [database 138, 140, Fig. 3; col. 11, lines 31 – 60].

78. It would have been obvious to a person of ordinary skilled in the art at the time of the invention to apply the teaching of a database comprising a command table regarding a command and a user interface object table comprising information regarding the user interface object and the command to be issued upon activation of the user interface object as taught by Wagner to the invention of Rahman as modified because this stores at least some of the message types and preferences of the users for one of the communication channels to employ with one of the at least some of the message types [col. 3, lines 49 – 52 of Wagner].

79. As to claim 65, Rahman as modified teaches a configuration table comprising information regarding a configuration for a user of the user interface, wherein the configuration determines whether the command is available to the user [col. 11, lines 32 – 39 of Wagner].

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80. As to claim 66, Rahman as modified teaches the command table and the user interface object table are accessed to cause the channel driver to issue the command [col. 9, lines 9 – 39 of Wagner and col. 6, lines 23 – 30 of Trent].

Conclusion

81. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent NO. 6,332,154 to Beck et al. teaches a multimedia call center operating through an operating system.

U.S. Patent NO. 6,690,788 to Bauer et al. teaches an integrated work management engine for customer care.

U.S. Patent NO. 6,480,600 to Neyman et al. teaches a call center having agent stations and virtual restructuring for computer telephony integrated functionality.

U.S. Patent NO. 6,493,760 to Pendlebury et al. teaches document services in a token-enabled operating environment.

CONTACT INFORMATION

82. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Li B. Zhen whose telephone number is (571) 272-3768. The examiner can normally be reached on Mon - Fri, 8:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on 571-272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Li B. Zhen
Examiner
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